

# IMPROVEMENT STRATEGIES MODEL: FACILITY ORGANIZATION AND MANAGEMENT: PERFORMANCE MEASUREMENT AND MANAGEMENT

## CORE PRINCIPLES OF FACILITY ORGANIZATION AND MANAGEMENT

Facility organization and management includes: the effective organization of facility operations; deployment of human resources in multidisciplinary teams; routine collection and use of information systems to establish targets, monitor progress, and implement ongoing quality improvement initiatives; and the capability of managers to oversee, support, and enforce these processes.

### TEAM-BASED CARE ORGANIZATION

Team-based care organization refers to groups of providers with diverse training, education, and capabilities.(1) Working together and leveraging their distinct expertise, these teams are designed to provide comprehensive, coordinated, and efficient primary health care to patients.(2) Effective team-based care involves two central components: comprehensive team composition to meet population health needs and strong team culture focused on communication, respect, and trust between team members.

### FACILITY MANAGEMENT CAPABILITY AND LEADERSHIP

Facility management capability and leadership refers to the capabilities of managers and leaders within a facility. Leaders should have relevant skills related to coordination of operations, external/consumer relations, target setting, and human resources.(3) Strong leaders must have or develop particular competencies and personality traits to engage the workforce and manage effectively. Competencies can be defined as the combination of motive, trait, skill, self-image, social role, and body of relevant knowledge.(4) Managers should be properly equipped with the tools, systems, and skills to productively assess the health workforce within a facility and provide supportive supervision.

### INFORMATION SYSTEMS USE

Information systems use is the effective utilization of existing information systems (the infrastructure related to Information Systems is addressed in the Information Systems module within Systems - forthcoming) and the data they produce at the facility level to coordinate care, monitor performance, and drive management. Effective information systems use can support a variety of purposes ranging from priority setting to clinical tasks and education. Information systems should be easy to use with clear expectations of use and systems for monitoring and evaluation and should provide easily accessible information to those who use them.

### PERFORMANCE MEASUREMENT AND MANAGEMENT

Performance measurement and management includes both supportive and continuous supervision of staff as well as the routine establishment of performance targets, monitoring of progress towards these targets, and implementation of quality improvement (QI) initiatives to address identified gaps. These measurement systems should be designed with feedback loops to target results to the end users of the data and should be ensconced in larger continuous QI systems.

## WHAT COULD YOUR COUNTRY ACHIEVE BY FOCUSING ON FACILITY ORGANIZATION AND MANAGEMENT?

Facility organization and management, when done effectively, can contribute to an array of downstream effects. These may include:



## FACILITY ORGANIZATION AND MANAGEMENT: WHAT ARE THE FIRST STEPS?

The four sub-components within Facility Organization and Management (team-based care organization, facility management capabilities and leadership, information systems use, and performance measurement and management) are diverse, addressing elements of workforce, infrastructure, and individual competencies. Consequently, strategies to improve service delivery within facility organization and management are far-reaching, and the best fit for any given context may be highly contingent upon pre-existing structures, systems, and capacities. For instance, improvements in team-based care organization may require the education and integration of a new cadre of providers in one context, while in a second context training for existing team members in respectful teamwork may be needed. Thus, the order in which health systems address sub-components of facility organization and management is dependent upon initial assessments, the magnitude of change needed, and contextual feasibility. The following sequencing of domains is intended to show the interconnectedness of these elements rather than imply a specific pathway that must be followed.

[Information systems use](#) underlies many aspects of facility organization and management. Planning services, allocating resources, accessing patient information, and evaluating performance or management of a health facility and its staff all require robust facility data originating from information systems that are well integrated into the facility and are easy to use. Building on the inputs to establish these information systems, more efficient use of information systems can be championed by facility leaders and managers. Making use of information systems and relevant data, facility leaders - whose skill sets and responsibilities are encompassed by [facility management capability and leadership](#) - can enact necessary reforms or changes in service delivery, monitor change, and foster a facility culture and learning system which values data use for continual improvement. Data on the size and needs of the population should inform the composition and size of [care teams](#) while the culture, goals, and responsibilities within the teams should be guided and facilitated by leadership. Finally, well-designed [performance measurement and management](#) systems should be used to monitor the functioning of all aspects of a facility, including team-based care, information systems, and facility leadership, highlighting gaps and subsequently

## FACILITY ORGANIZATION AND MANAGEMENT

opportunities for continued improvement. Facility managers should have the necessary training and capability to use data to guide improvement.

**What it is****PERFORMANCE MEASUREMENT AND MANAGEMENT**

What others have done

Performance measurement and management encompasses systems for monitoring performance and managing through implementing improvement strategies within facilities. The measurement systems that facilitate performance measurement and management should be designed with feedback loops to the end users of the data and should be part of larger continuous quality improvement (QI) systems.

How to get started

How to succeed

**WHAT SHOULD I KNOW BEFORE BEGINNING IMPLEMENTATION?**

Performance measurement and management entails: (5)

- ▶ Choosing measures and setting facility performance targets
- ▶ Instituting measurement and monitoring systems to track progress towards those targets
- ▶ Adapting and improving

Targets can be related to structure and process, but should focus on outcomes. It is also important to ensure that performance measurement systems are capable of tracking individual provider performance. This knowledge can help facility managers and leaders understand how providers are contributing to larger facility targets. For management to be useful, stakeholders also need to consider building capacity for data analysis and use at facilities.

**CHOOSING MEASURES AND SETTING TARGETS**

The goal of performance measurement and management systems is to actively identify areas for improvement within a facility and implement necessary changes, eventually leading to improved outputs and outcomes. However, performance management systems must be designed with adequate forethought to identify the types of indicators or processes that will be monitored and how these map to the overarching goals and targets of the health system. Targets within a health facility may relate to myriad functions including equipment and supplies, the process or outcomes of specific interventions, efficiency, quality, provider competence, or patient and provider satisfaction. Selected targets should be actionable, realistic, and clearly communicated to staff and stakeholders.(6)

The Safety Net Medical Home Initiative implementation guide identifies four considerations when selecting targets for performance management:

- ▶ Align with nationally-endorsed measures and standardized data definitions when possible - these data may already be collected and could therefore reduce staff time and information system changes
- ▶ Consider the resources needed to be able to collect and report a measure compared to the value that the measure serves - some data may be particularly laborious or time intensive to record and collect. If so, their utility should be carefully considered.
- ▶ Ensure a comprehensive measure set to reflect changes - measures should be mapped to the processes and outcomes that are expected to take place during service delivery changes
- ▶ Consider audience - various stakeholders in a health system will be interested in different measures. Leaders should consider the range of stakeholders to whom data will be presented when identifying performance targets and measures.(6)

**What it is****INSTITUTING MEASUREMENT AND MONITORING SYSTEMS**What others  
have done

After key indicators and associated targets are selected, the second component of performance measurement and management is instituting a measurement/monitoring system to track progress towards targets. Performance management depends on data and information systems to identify deficits and strengths.

How to get  
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Managers must have access to performance measurement data, have the capacity to interpret data, and be able to set action plans based on gaps identified in the data. Staff should be involved throughout the process; they should be aware of targets, receive updates on performance data, and be engaged in data interpretation and development of action plans.

How to  
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Another important consideration when assessing measurement and monitoring systems is the frequency with which data are collected, analyzed, and shared. Facility managers must consider how long it will take to collect a sufficient quantity of data to make meaningful conclusions and balance that with any reporting requirements or internal improvement processes.

When implementing performance measurement systems, stakeholders should be aware of how individual provider performance is measured and communicated. Data on provider performance can complement facility-level performance data; with both, stakeholders can understand how individual providers contribute to successes or areas for growth within a facility. However, provider performance management should be designed such that feedback is actionable and encourages improvement - sometimes with incentives - rather than purely punitive. If providers feel that performance measurement is futile and/or only used to punish them, they will not be motivated to improve and actively collaborate with managers to identify areas for growth. More information is included in the [provider motivation](#) module.

Systems for individual-level provider performance management should incorporate provider perceptions and involve collaboration between providers and managers to develop actionable improvement plans. Some examples of questions that managers may ask providers to catalyze performance review and improvement include:

- ▶ Please describe results or responsibilities you delivered that contributed to better results for your team and/or organization?
- ▶ Please describe results or responsibilities you fell short of achieving? What could have been done to achieve better results?
- ▶ What part of the organization's mission do you demonstrate well?
- ▶ What part of the organization's mission do you struggle to demonstrate?
- ▶ How do you want to grow in this team, and what steps are required to get there?

Staff supervision is a form of applied, individual-level performance measurement and management. However, not all supervision is equally effective. There has been inconclusive evidence of the effects of supervision in LMIC. A systematic review in 2011 found small improvements in provider practice and provider knowledge in some studies, but the data did not provide substantial evidence to support any conclusions.<sup>(7)</sup> This was echoed in another systematic review on support and performance improvement for PHC workers in LMIC. This review identified supervision as one of five approaches to performance improvement. The others included mentoring, tools and aids, quality improvement methods, and coaching.<sup>(8)</sup> Although supervision was the most studied of the five approaches, the types of supervision and results were heterogeneous. The authors concluded that while supervision did seem promising, more research was needed on how supervision is delivered to determine the effect.

By contrast, supportive supervision - whereby supervisory practices focus on problem solving and strengthening relations between staff rather than high-level problem solving - has been found to improve

**What it is**

quality of care and job satisfaction in Sub-Saharan Africa.(9) While traditional supervision often focuses on inspection and line management, resulting in punitive or corrective action and negatively affecting provider motivation and satisfaction, supportive supervision instead aims to build pathways to improvement through active collaboration between providers and supervisors.(9) However, it is important to note that supportive supervision may only be effective if providers have a baseline level of support such as adequate drugs and supplies, human resources, workload, incentives, and career development. A systematic review of supportive supervision in Sub-Saharan Africa found that supportive supervision had the greatest positive impact when the following components were also in place: (9)

- ▶ Two-way communication between provider and supervisor, including real-time feedback
- ▶ Non-judgmental approach, actively listening, and humility
- ▶ Cordial relationships and consensus to work together

It is important to note that supervisors cannot be expected to immediately understand how to provide supportive supervision. Supervisors should be trained on how to coach, mentor, communicate, and conduct performance planning. Additionally, supervisors can be taught adult learning and training techniques to improve their skills.(10)

## ADAPTING AND IMPROVING

Data from performance measurement systems should be shared with staff and other relevant stakeholders and incorporated into future facility goals/targets and improvement plans. Analyses of data from facilities may suggest that facility leaders should adapt targets, set new ones, develop an intervention, or explore various processes further.

Many of the principles of performance measurement and management are captured in a variety of quality improvement methodologies and tools. In general, these methods suggest using data to identify a problem and then identifying the factors that led to the problem. This process can help surface potential solutions. Some useful resources include:

[Plan-Do-Study-Act \(PDSA\)](#) - PDSA is a framework for a cyclical improvement process where implementers plan an initiative, implement the plan, study the results, and make further improvements.

[Situation, Background, Assessment, Recommendation \(SBAR\)](#) - SBAR is a communication method for team members to identify and discuss patient conditions.

[The Fishbone Method](#) - The fishbone method can help teams understand the factors that are driving system failures.

[5 Whys](#) - The 5 Whys is another root cause analysis method. As the name suggests, in this method a provider or team considers a problem and asks and identifies why it is occurring five times.

[Standards-Based Management and Recognition \(SBM-R\) methodology](#) - SBM-R is a performance and quality improvement approach that includes 1) setting standards 2) implementing standards 3) measuring progress, and 4) recognizing achievement of those standards

[IHI Open School](#) - The Institute for Healthcare Improvement Open School has a number of different resources for quality improvement.

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## WHAT HAS BEEN DONE ELSEWHERE TO IMPROVE PERFORMANCE MEASUREMENT AND MANAGEMENT?

What others have done

How to get started

How to succeed

### BALANCED SCORECARD - AFGHANISTAN

In 2002, The Ministry of Public Health in Afghanistan - with input from other organizations - designed a Basic Package of Health Services (BPHS) intended to encompass all basic PHC needs. The six components of the BPHS were maternal and newborn health, child health and immunization, public nutrition, communicable diseases, mental health, disability, and regular supply of essential drugs.(11) National Health Service Performance Assessments were initiated by the Ministry of Public Health in 2004 to measure the performance of the BPHS.(12) Evaluations were based on a balanced scorecard (BSC) performance system which included a comprehensive list of performance indicators that measured both process and outcomes of the program. The BSC system was initially developed to evaluate industry performance and has been adapted for use in health. For five years, data from patient observations, exit interviews, and provider interviews were collected from 25 facilities. These data were incorporated into the BSC, and there was evidence of consistent improvement in patient and provider satisfaction, service provision, quality of services, equity, and financial system over the study period. The tool enabled facilities to identify emergent needs for allocation of resources and innovations and helped facilities learn how to adapt based on findings from data. While the BSC may be useful for performance benchmarking and strategic management, the authors noted that its continued utility will depend on stakeholders' ability to adapt the tool to future changes in health systems. A [BSC template](#) can be found on the Institute for Healthcare Improvement website.

### DATA FEEDBACK FOR IMPROVEMENT - COSTA RICA

The health care reforms in Costa Rica in the early 1990s addressed many aspects of facility organization and management and included systematic measurement and data feedback loops for performance measurement and improvement. Costa Rica's EBAIS teams (comprehensive care teams that provide primary care in facilities and communities) regularly collect relevant epidemiological data from communities through the Evaluacion de la Prestacion de Servicios de Salud (EPSS) evaluation. The indicators measured by the EPSS assess access to care, continuity of care, effectiveness, efficiency, and user satisfaction.(13) After collection, these data are sent to the health area and then the CCSS authority who analyzes and returns the data to health areas and EBAIS teams. The results are used to assess performance against existing targets, define the next set of targets, and redirect resources to areas in need.(14) If a Health Area falls within the lowest 20 percent, they work with the Department of Purchasing Health Care Services to create improvement plans. Thus, Costa Rica demonstrates how performance management systems can be used to identify gaps, collaborate on solutions, and improve. More detail on Costa Rica's primary health care system can be found in this [case study](#).

### HEALTH GOALS - CHILE

Chile's performance measurement and management system has actionable steps, clear data feedback, and transparency. In 2002, Chile established Health Goals as the basis for a pay-for-performance scheme whereby providers received bonus payments for meeting specified targets. This system was supplemented by the Primary Health Care Activity Indicators established in 2005. The indicators primarily address prevention and care processes, with a few related to continuity and care standards across 12 diseases. Data transfer is standardized across the country; data for these indicators are recorded in electronic records that are collected daily by the Medical and Statistic Orientation Office at each facility, transferred to the Monthly Statistical Register, and subsequently sent to the territorial Health Service and the Ministry of Health. Findings are returned to the municipalities to set quarterly targets and are also

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available online. Additionally, various stakeholders meet annually to discuss any necessary changes to indicators or targets. (15)

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## WHAT QUESTIONS SHOULD BE CONSIDERED TO BEGIN IMPROVEMENTS?

The questions below may be a useful starting place to help stakeholders determine whether performance measurement and management is an appropriate area of focus for a given context and how one might begin to plan and enact reform:

### **ARE THERE ANY NATIONAL REPORTING REQUIREMENTS THAT MUST BE INCORPORATED INTO PERFORMANCE MEASUREMENT SYSTEMS?**

In order to reduce duplication in data collection, new performance measurement systems should align with existing national reporting systems or requirements. Aligning with existing data definitions and standardized indicators can also improve efficiency. (6)

### **WHO SHOULD BE INVOLVED IN SELECTING (OR REVIEWING) MEASURES AND SETTING TARGETS? HOW WILL COMMUNITY FEEDBACK BE INCORPORATED IN THIS PROCESS?**

Performance measures should be reviewed and adapted by a group of diverse stakeholders, including community members. Stakeholders should leverage existing community groups and venues to obtain feedback on targets.

### **WHAT DATA MUST BE COLLECTED TO MEASURE TARGETS? DO THESE DATA ALIGN WITH NATIONAL INDICATORS? ARE THERE ANY NECESSARY CHANGES TO INFORMATION SYSTEMS OR WORKFLOW TO ACCOMMODATE COLLECTION OF THESE DATA?**

In order to improve efficiency, it is important to ensure that targets can be easily integrated into data systems and that any necessary data collection will not place a burden on providers and their workflow.

### **HOW WILL PERFORMANCE BE SHARED WITH STAKEHOLDERS, INCLUDING COMMUNITY MEMBERS?**

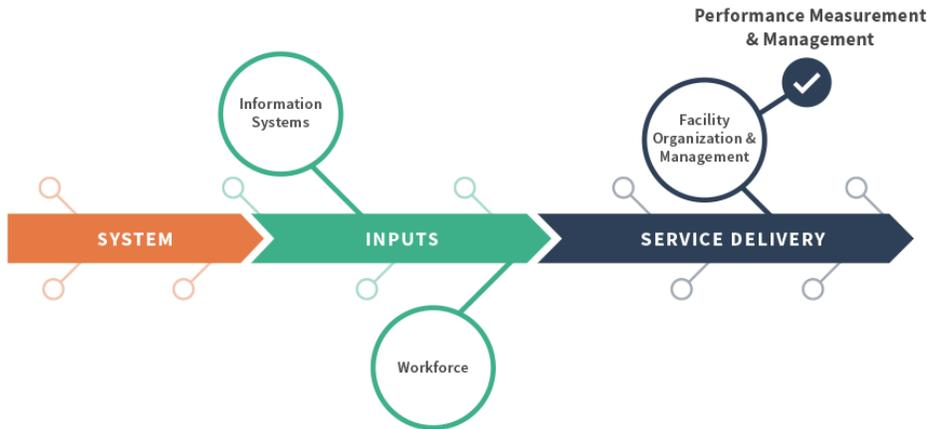
Data on facility performance should be shared with facility stakeholders and patients regularly. These systems for dissemination should be considered from the outset, and data should be tailored to the target audience's literacy.

### **WHAT DATA FEEDBACK LOOPS WILL BE PUT IN PLACE TO ENSURE THAT LOCAL DATA RELEVANT TO FACILITY PERFORMANCE CAN BE REVIEWED AND USED AS A BASIS FOR IMPROVEMENT?**

These systems should be explicit both in the structure and processes needed to ensure that data is returned (i.e. information systems for sharing data) and also organizational processes for responding to data insights (i.e. facility leadership meetings).

## WHAT ELEMENTS SHOULD BE IN PLACE TO SUPPORT EFFECTIVE IMPROVEMENTS?

In order for interventions aimed at improving performance measurement and management to be most successful, the following elements of the PHCPI Conceptual Framework should be in place or pursued simultaneously:



### B3. INFORMATION SYSTEMS

Information systems should be leveraged to support performance measurement and management. They can serve a variety of purposes including data collection, analysis, and transfer and can help facility managers and leaders track progress towards targets and changes in performance over time. However, information systems are only efficient if those who use them are well-trained.

### B4. WORKFORCE

As with all facility-level interventions, there must be a sufficient health workforce to both conduct performance measurement and management and to carry out prioritized interventions identified through these systems.

### C2.B FACILITY MANAGEMENT CAPABILITY AND LEADERSHIP

Managers within the facility should be trained in quality improvement methods and be capable of analyzing facility performance and subsequently acting to improve it. Leaders should ensure that there is protected time in a work week for all staff to discuss, plan, review, and act upon new ideas. Leaders should also ensure that they are considering the bounds of primary health care and facilitating access to care across levels of the health system to improve health outcomes and access.

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